# Sertifikaat

REPUBLIEK VAN SUID AFRIK

PATENT KANTOOR DEPARTEMENT VAN HANDEL EN NYWERHEID



REPUBLIC OF SOUTH AFRICA

PATENT OFFICE DEPARTMENT OF TRADE AND INDUSTRY

Hiermee word gesertifiseer dat This is to certify that

REC'D 1'3 MAY 2004
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the documents annexed hereto are true copies of:

Application forms P.1 and P.3, provisional specification and drawings of South African Patent Application No.2003/2510 as originally filed in the Republic of South Africa on 31 MARCH 2003 in the name of INVEST IN PROPERTY 19 (PTY) LTD for invention entitled: "FUEL ELEMENT."

PRIORITY DOCUMENT

SUBMITTED OR TRANSMITTED IN COMPLIANCE WITH RULE 17.1(a) OR (b)

28<sup>th</sup>

Geteken te

in die Republiek van Suid-Afrika, hierdie

**PRETORIA** 

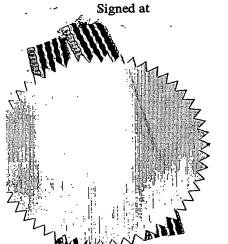
in the Republic of South Africa, this

dag van

April 2004

day of

Registrar of Patents



ADAMS & ADAMS **PRETORIA** 

#### REPUBLIC OF SOUTH AFRICA PATENTS ACT, 1978

### DECLARATION AND POWER OF ATTORNEY

(Section 30 - Regulation 8, 22(i)(c) and 33)

| PATENT APPLICATION NO A&A Ref: V15674   |  |  |                        |                        |           |                   | LODGING DATE                  |                                    |  |
|---|--|--|------------------------|------------------------|-----------|-------------------|-------------------------------|------------------------------------|--|
| 21  | 01   | 2003/2510  |                        |                        |           |                   | 22                            | 31 March 2003                      |  |
|   |  |  |                        |                        |           |                   |                               |                                    |  |
| FULL NAME(S) OF APPLICANT(S)  |  |  |                        |                        |           |                   |                               |                                    |  |
| 71  | INVEST IN PROPERTY 19 (PTY) LTD  |  |                        |                        |           |                   |                               |                                    |  |
| FULL NAME(S) OF INVENTOR(S)   |  |  |                        |                        |           |                   |                               |                                    |  |
| LEHMAN, Chad Daniel   |  |  |                        |                        |           |                   |                               |                                    |  |
| EARLIEST PRIORITY CLAIMED   |  |  |                        | COUNTRY   NUMBER       |           |                   | DATE                          |                                    |  |
|   |  |  | 33                     | Nil                    | 31        | Nil               | 3                             | 2 Nil                              |  |
| NOTE  | 3: The   | country must be indicated by its In                      | ternational A          | Abbreviation - see s   | chedule 4 | of the Regulation | <br>18                        |                                    |  |
| TITLE OF INVENTION  |  |  |                        |                        |           |                   |                               |                                    |  |
| FUEL ELEMENT  |  |  |                        |                        |           |                   |                               |                                    |  |
|   | LEHMAN, Chad Daniel hereby declare that:-  |  |                        |                        |           |                   |                               |                                    |  |
|   | 1.   | I/we am/are the applicant(                               | a <del>) mentior</del> | ned above:             |           |                   |                               | ^                                  |  |
| **  | I/we have been authorized by the applicant(s) to make this declaration and have knowledge of the facts herein stated in the capacity of Director of the applicant(s);  |  |                        |                        |           |                   |                               |                                    |  |
| *** 3. the inventor(s) of the abovementioned invention is/are the person(s) named above and the applicant(s) has/acquired the right to apply by virtue of an assignment from the inventor(s);   |  |  |                        |                        |           |                   | and the applicant(s) has/have |                                    |  |
| 4. to the best of my/our knowledge and belief, if a patent is granted on the application, there will be for the revocation of the patent;   |  |  |                        |                        |           |                   |                               | on, there will be no lawful ground |  |
| ****  | <ol> <li>this is a convention application and the earliest application from which priority is claimed as set out above is the<br/>first application in a convention country in respect of the invention claimed in any of the claims; and</li> </ol> |  |                        |                        |           |                   |                               |                                    |  |
| 6. the partners and qualified staff of the firm of ADAMS & ADAMS, patent attorneys, are authorised, jointly and severally, with powers of substitution and revocation, to represent the applicant(s) in this application and to be the address for service of the applicant(s) while the application is pending and after a patent has been granted on the application. |  |  |                        |                        |           |                   |                               |                                    |  |
|   | SIG  | NED THIS 11th DA   | Y OF                   | June                   |           | :                 | 2003                          |                                    |  |
|   | Ful  | mpany Name: INVEST IN 1 Names: LEHMAN, Coacity: Director | PROPER<br>Chad Da      | TY 19 (PTY) L<br>aniel | TD        |                   |                               |                                    |  |

<sup>(</sup>no legalization necessary)

In the case of application in the name of a company, partnership or firm, give full names of signatory/signatories, delete paragraph 2.

If the applicant is a natural person, delete paragraph 2.

If the right to apply is not by virtue of an assignment from the inventor(s), delete "an assignment from the inventor(s)" and give details of acquisition of right.

For non-convention applications, delete paragraph 5.

FORM P.1 REPUBLIC OF SOUTH AFRICA PATENTS ACT, 1978 APPLICATION FOR A PATENT AND ACKNOWLEDGEMENT OF RECEIPT (to be lodged in duplicate) 0600031. 3203 (Section 30(1) Regulation 22) THE GRANT OF A PATENT IS HEREBY REQUESTED BY THE UNDERMENTIONED APPLOYED THE BASIS OF THE PRESENT APPLICATION FILED IN DUPLICATE MARIE WAS SED AND 21 71 FULL NAME(S) OF APPLICANT(S) INVEST IN PROPERTY 19 (PTY) LTD ADDRESS(ES) OF APPLICANT(S) 201 Momentum West Tower, 343 Pretorius Street, PRETORIA, Republic of South Africa TITLE OF INVENTION **FUEL ELEMENT** Only the items marked with an "X" in the blocks below are applicable. THE APPLICANT CLAIMS PRIORITY AS SET OUT ON THE ACCOMPANYING FORM P.2. The earliest priority claimed is THE APPLICATION IS FOR A PATENT OF ADDITION TO PATENT APPLICATION NO THIS APPLICATION IS A FRESH APPLICATION IN TERMS OF SECTION 37 AND BASED ON APPLICATION NO THIS APPLICATION IS ACCOMPANIED BY: A single copy of a provisional specification of 6 pages Drawings of 1 sheet X Publication particulars and abstract (Form P.8 in duplicate) (for complete only) of the drawings (if any) for the abstract (for complete only) A copy of Figure An assignment of invention Certified priority document(s). (State quantity) Translation of the priority document(s) An assignment of priority rights 01 A copy of Form P.2 and the specification of RSA Patent Application No Form P.2 in duplicate A declaration and power of attorney on Form P.3 Request for ante-dating on Form P.4 Request for classification on Form P.9 Request for delay of acceptance on Form P.4 Extra copy of informal drawings (for complete only) Adams & Adams, Pretoria ADDRESS FOR SERVICE:

Dated this 31st day of March 2003

ADAMS & ADAMS
APPLICANTS PATENT ATTORNEYS

The duplicate will be returned to the applicant's address for service as proof of lodging but is not valid unless endorsed with official stamp

REGISTRAR OF PATENTS DESIGNS, TRADE MARKS AND COPYRIGHT

2003 -03- 3 1

REGISTRATEUR VAN PATENTE, MODELLE, HANDRESMERKETEN DEMEURSKEG A & A Ref No: V15674

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· FORM P6

## REPUBLIC OF SOUTH AFRICA Patents Act, 1978

### PROVISIONAL SPECIFICATION

(Section 30 (1) - Regulation 27)

21 01 OFFICIAL APPLICATION NO

22 LODGING DATE

**2003/25**10

31 March 2003

71 | FULL NAME(S) OF APPLICANT(S)

**INVEST IN PROPERTY 19 (PTY) LTD** 

72 | FULL NAME(S) OF INVENTOR(S)

**LEHMAN, Chad Daniel** 

54 | TITLE OF INVENTION

**FUEL ELEMENT** 

THIS INVENTION relates to solid fuel. More particularly, it relates to a solid fuel element and to a method of manufacturing a solid fuel element.

According to one aspect of the invention, there is provided a solid fuel element which is impregnated with a liquid fuel or accelerant.

The solid fuel element may be a briquette made of a compressed combustible material. It may instead be of charcoal. The solid fuel element may be coated or sealed with a coating or seal of a flammable sealant. More particularly, the solid fuel element may be coated or sealed with a hydrocarbon wax, such as, for example, paraffin wax.

The compressed combustible material may be carbonaceous material, such as charcoal or coal dust. Preferably, it will be a compressed charcoal briquette of the type used for outdoor cooking. Instead, the compressed combustible material may be cellulosic material, such as, for example, wood shavings.

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The liquid fuel or accelerant may be a liquid paraffin.

According to another aspect of the invention, there is provided a solid fuel element which has a waterproof outer coating or sealing layer.

The solid fuel element may be as hereinbefore described.

The coating or sealing layer may be a coating or sealing layer of a flammable material. More particularly, the coating may be a hydrocarbon wax, such as, for example, paraffin wax.

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According to yet another aspect of the invention, there is provided a method of making a solid fuel element, which method includes the steps of

at least partially immersing a combustible material in a liquid fuel so that at least some of the liquid fuel is absorbed by the combustible material to produce a liquid fuel-containing combustible material; and

coating or sealing the liquid fuel-containing combustible material with a sealing material thereby to seal the liquid fuel absorbed into the combustible material.

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The combustible material may be solid charcoal or a briquette of compressed charcoal.

The method may then include the prior step of compressing granular charcoal to form the briquette.

Instead, the combustible material may be a compressed cellulosic material, such as wood shavings, or granular coal, the method then including the prior step of compressing the cellulosic material or granular coal to produce a body of the cellulosic material or granular coal.

The coating or sealing material may be a hydrocarbon material, such as, for example, paraffin wax. Applying the coating may then include at least partially immersing the briquette or body of cellulosic material or granular coal in a bath of molten paraffin wax.

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The invention will now be described, by way of example, with reference to the accompanying diagrammatic drawing, which shows a sectional perspective view of a solid fuel element in the form of a briquette in accordance with the invention.

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In the drawing, reference numeral 10 generally indicates a fuel element in the form of a briquette in accordance with the invention. The briquette 10 includes a body 12 comprised mainly of a solid carbonaceous material, more particularly, charcoal.

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It is to be appreciated that the invention extends to a fuel element having a body of other combustible material, such as, for example, comprised mainly of solid cellulosic material, eg wood shavings.

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The body 12 is impregnated with an accelerant, provided by a liquid fuel (not shown). In a preferred embodiment of the invention, the liquid fuel is a liquid paraffin. Typically, the liquid paraffin is absorbed into a core 16 of the body 12.

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The body 12 is further coated with a layer of a flammable solid hydrocarbon wax 14, typically, paraffin wax. Typically, the coating 14 has a thickness of between about 1 mm and about 3,0 mm although this value may vary in practice from batch to batch.

#### **EXAMPLE**

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The briquette 10 was prepared by submerging the body 12 in a bath of liquid paraffin so that the briquette 10 absorbed about 10 ml of the liquid fuel. The briquette 10 was removed from the bath of liquid paraffin and allowed to stand for about 1 minute whereafter it was dipped into a bath of hot paraffin wax so that between about 1,5 g and about 2 g of paraffin wax was deposited on a surface of the briquette 10.

It will be appreciated that the waxy coating 14 imparts a waterproof property to the briquette 10. Moreover, the coating 14 serves to seal the liquid paraffin into the body 12 thereby to inhibit or prevent evaporation of the liquid paraffin accelerant.

The Applicant believes that the briquette 10 of the invention provides a self lighting and combustible briquette 10, dispensing with the need to employ fire lighters in igniting the briquette 10. It has been found that the briquette 10 is capable of ignition typically by use of a single match and yields a smouldering coal, in which the flame has burnt out within a short period of about 10 minutes. This in turn lends the briquette to use in preparing a fire suited to barbecuing within a relatively shorter time span of about 20 minutes than is the case with conventional briquettes. The Applicant believes that the briquette 10 of the invention will provide an inexpensive and effective means for generating an even bed of coals. Further, the briquettes 10 permit of handling thereof without associated fouling of the hands of a user as is the case with conventional briquettes/coal.

The Applicant believes that the invention would function better in outdoor, humid and rainy conditions than conventional briquettes due to its waterproof characteristics.

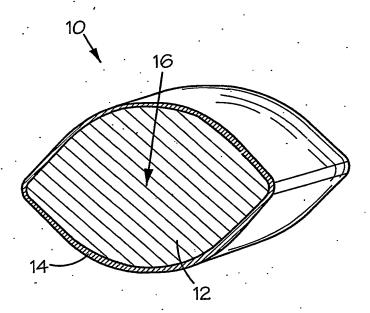
It is also an advantage that the briquette of the invention is more suitable for use in a semi-enclosed cooking area such as a patio than conventional briquettes as the briquette of the invention yields less smoke due to the accelerant's capability of igniting the briquette completely.

DATED THIS 31ST DAY OF MARCH 2003

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